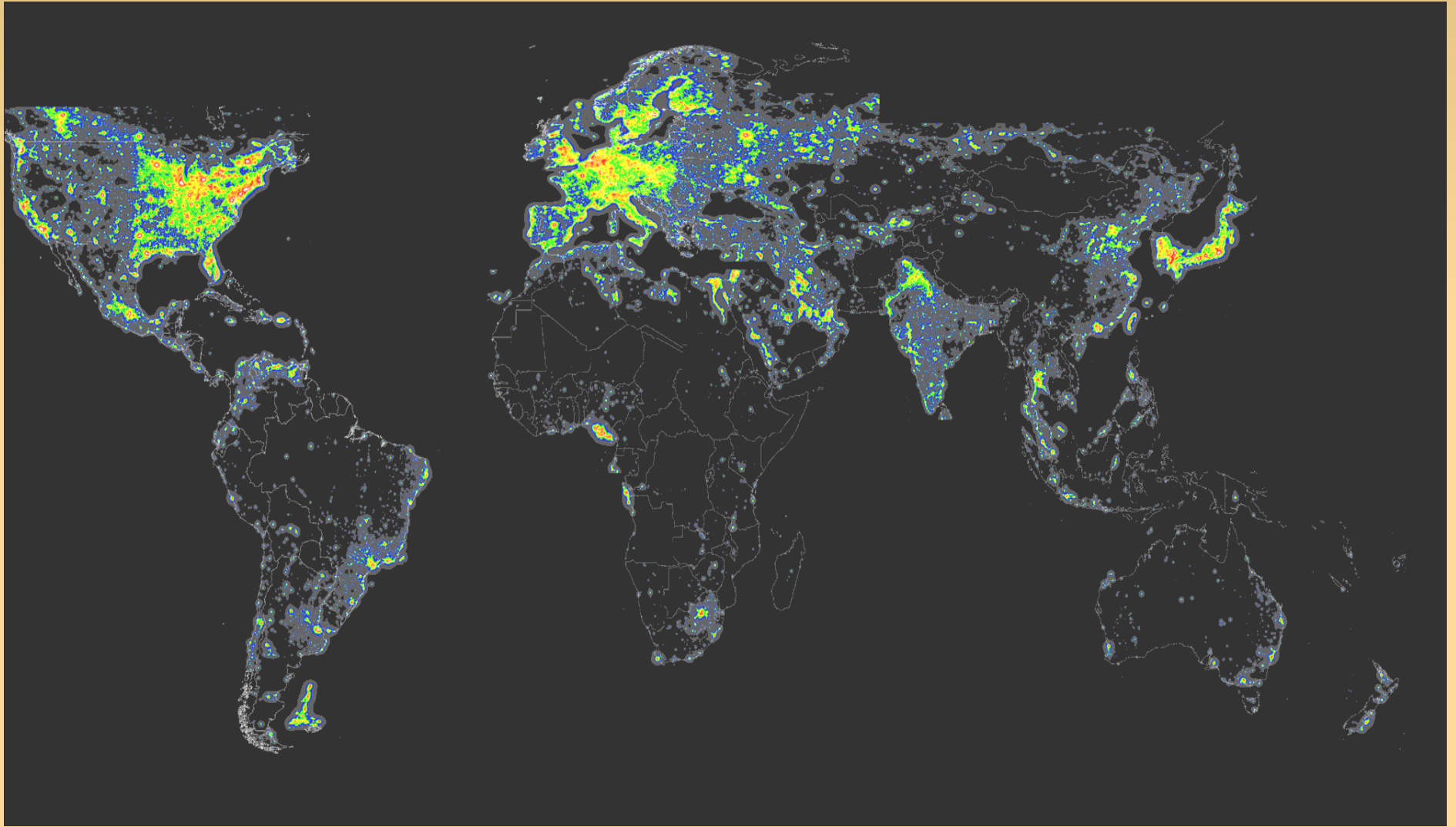


[www.wikieducator.org/FLOSS4Edu](http://www.wikieducator.org/FLOSS4Edu)

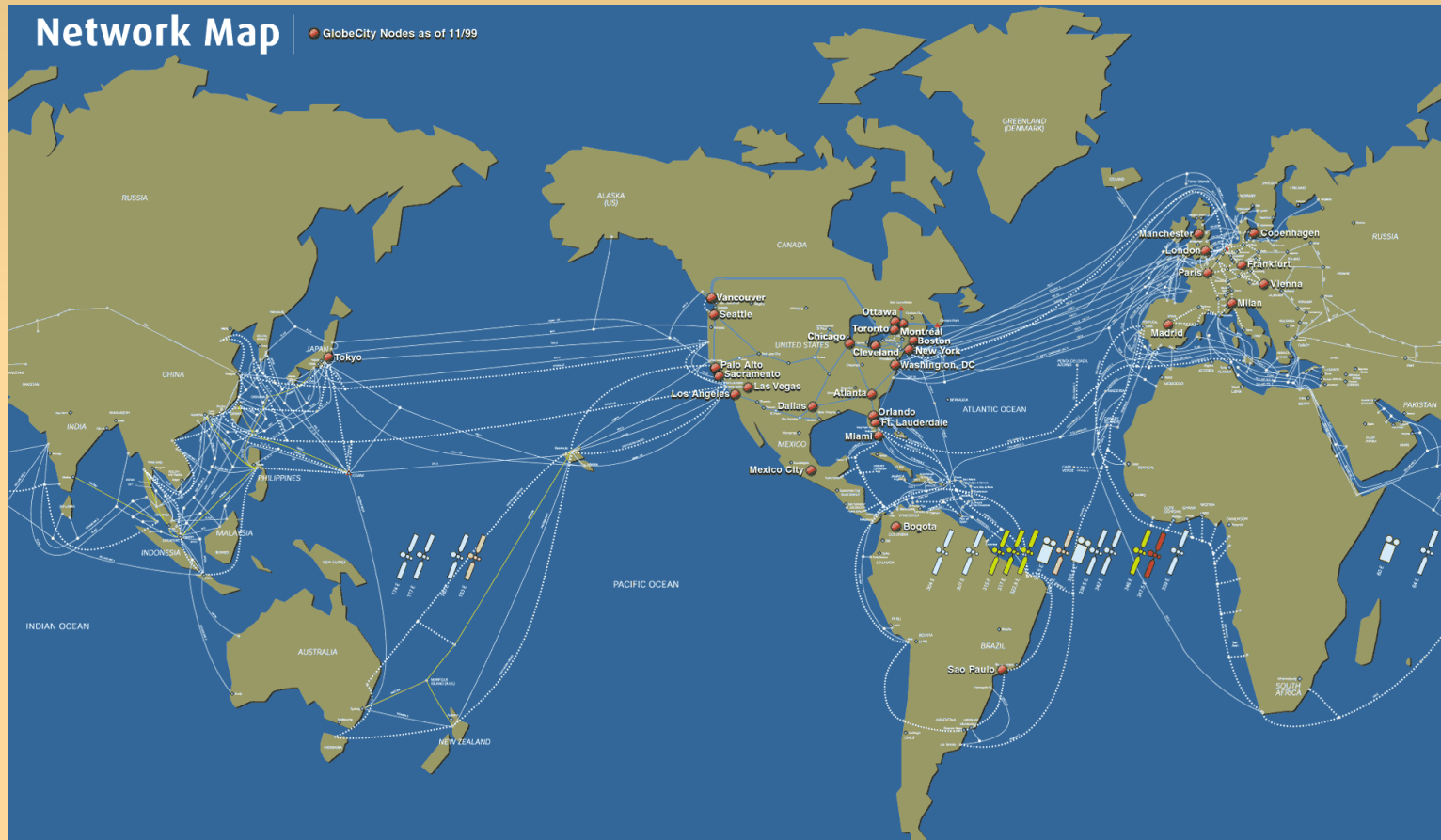
## WikiEducator and FLOSS4Edu in the Development of OER's for Africa

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[nicholas@wikieducator.org](mailto:nicholas@wikieducator.org) or [nicholas@futuristic.co.ke](mailto:nicholas@futuristic.co.ke)

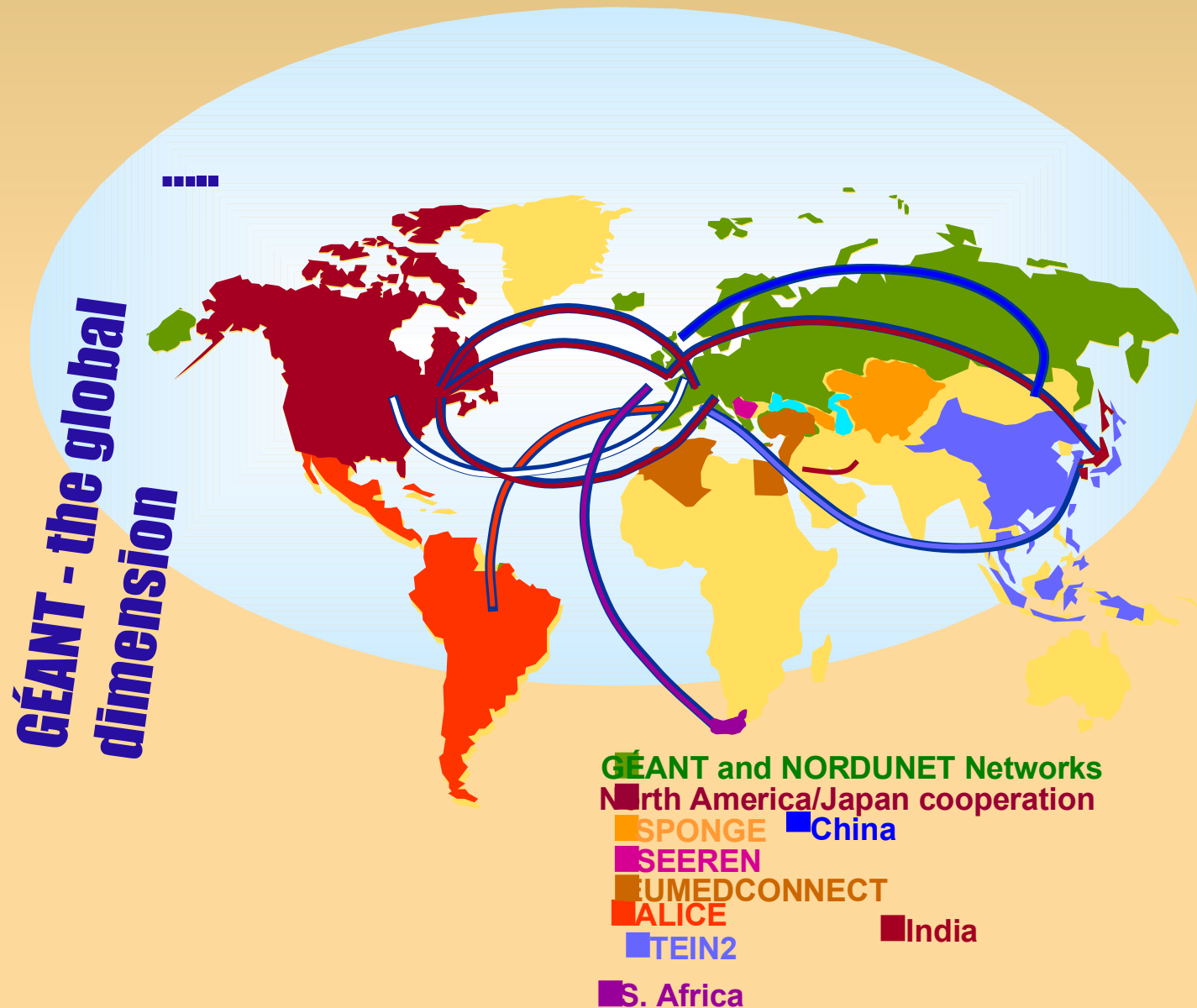
# Global Context: The lights of the World



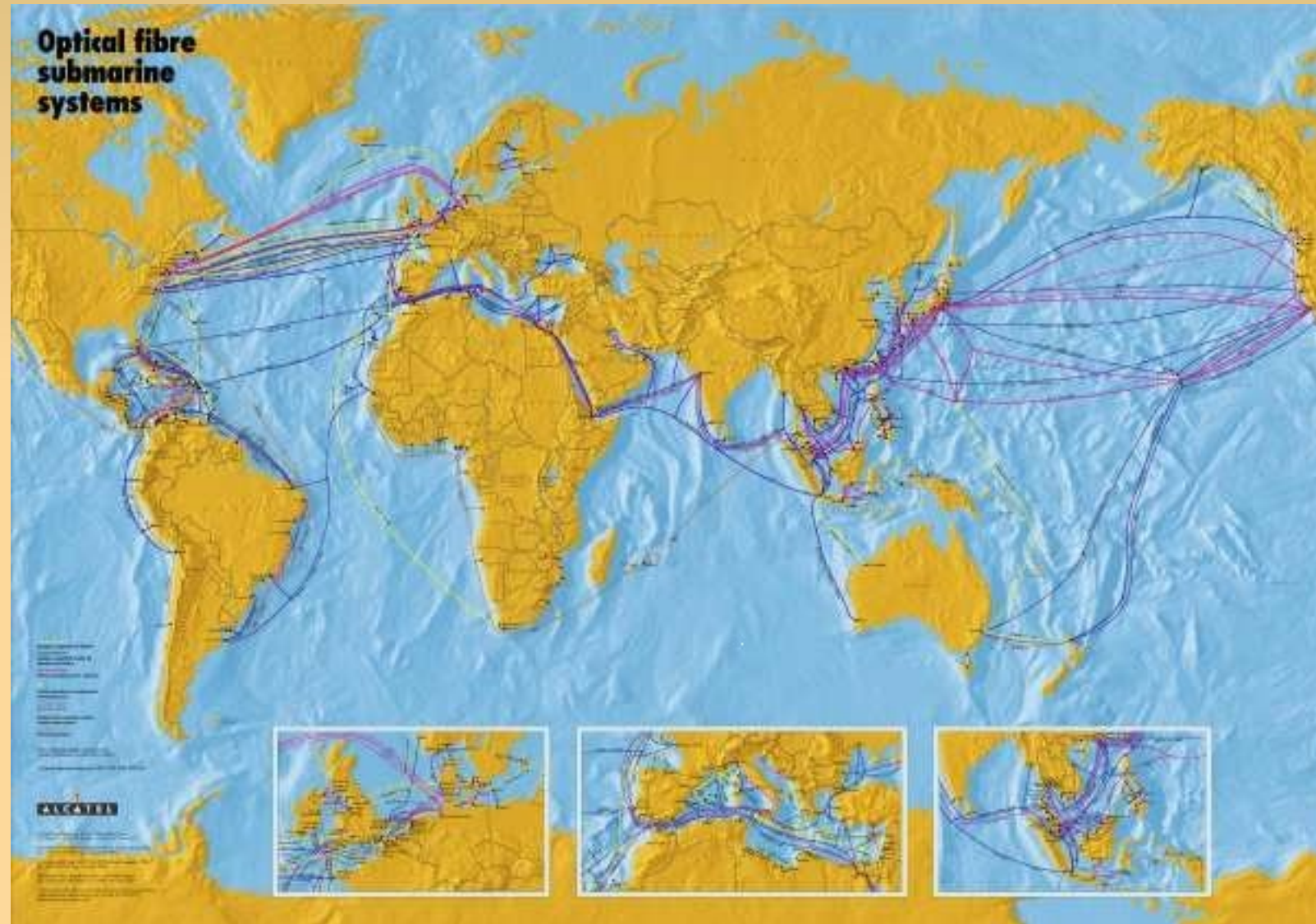
# Global Context: The submarine cables of the World



# Global Context: The Global Research Networks



# Global Context: The submarine cables of the World



# The Battle is over content

- Google acquires youtube.com for USD 1.6b and establishes Google University
- All big ICT Companies fighting for control of Content: Microsoft, Yahoo etc



# The Challenge

- Globalization and connected world
- WTO "Trade in Services" policy – Developing countries being forced to open their borders
- Cross border and transnational education

# The Challenge to Africa's Educational Institutions

- The emergence of global private higher educational institutions with broader context of globalization. This has led to increased competitive pressure forcing universities to be more efficient and strive for excellence
- Educational Institutions must engage with the social community and must be open to open peer review and critical rationality
- They must reduce costs through resource sharing and increase collaboration across national and institutional borders



# The Opportunities

- Great improvement in communication infrastructure
- Bandwidth costs will come down in most African countries in the next three years –as optical fibre infrastructure and submarine systems are put in place-EASSY and TEAMS, SAT3 etc
- Greater openness in Collaboration between education Institutions .
- Great demand for access to education

# What Constitute Open Educational Resources

- Open Course Content
- Open Source development tools
- Open standards and licensing tools

# What are Open Educational Resources

- Open educational resources, means
  - "that access to open content (including metadata) is provided in a free manner for educational institutions, content services, and the end-users such as teachers, students and lifelong learners;
  - that the content is liberally licensed for re-use in educational activities, favourable free from restrictions to modify, combine and repurpose the content; consequently, that the content should ideally be designed for easy re-use in that open content standards and formats are being employed;
  - that for educational systems/tools software is used for which the source code is available (i.e. Open Source software) and that there are open Application Programming Interfaces (open APIs) and authorisations to re-use Web-based services as well as resources."
  - Just as Open Source Software, they maintain the essential freedoms

# Benefits to Educational Networks

- Provide a long-term conceptual framework for alliances in the creation, sharing and provision of educational resources based on a strong emphasis of reusability;
- Allow for a higher return on investment of taxpayers' money (public funds) through better cost-effectiveness when reusing resources (e.g. sharing development costs among institutions or professional communities);
- Promote digital competence for the knowledge society beyond basic ICT skills through making available tools and content that allow learners to develop their critical thinking and creativity;
- Enrich the pool of resources (content and tools) for innovating curricula and teaching & learning practices, including resources from public sector information agencies, libraries, museums and other cultural organisations;
- Lead to a leverage in the educational quality of content through quality control, feedback and improvements within content alliances, communities and networks who share content (quality control through networks of developers and users has often been shown to bring good results);
- Foster lifelong learning and social inclusion through easy access to resources that may otherwise not be accessible by potential user groups.

# Benefits to Teachers and Learners

- Offer a broader range of subjects and topics to choose from and allow for more flexibility in choosing material for teaching and learning (i.e. content that can be easily modified and integrated in course material);
- Save time and effort through reusing resources for which IPR/copyright issues have already been resolved;
- Allow for engaging teachers in leveraging the educational value of resources through providing their own personal assessments, lessons learned and suggestions for improvements;
- Provide learning communities such as groups of teachers and learners with easy-to-use tools to set up collaborative learning environments (e.g. group Wikis or Weblogs, social networking, content feeds, etc.);
- Promote user-centred approaches in education and lifelong learning; users not only consume educational content but develop their own ePortfolios, and share study results and experiences with peers."

# The New Paradigm Shift in Education Content Delivery

- Focussed on the use of delivery mechanisms that support learners participation and contribution.
- These delivery mechanisms are based on a set of technologies and social phenomenon called Web 2.0 Technologies. The web is no longer about access but also participation
- Web 2.0 characterised by:
  - Increasing levels of two-way communication
  - Content Creation by users
  - Increased social interaction
  - Naturally formed communities of practice and social networking
  - Blurring distinction between desktop computing and web-based computing
- Web 2.0 Technologies include weblogs(blogs), wikis, content syndication(rss), podcasting/videocasting, social bookmarking, video and audio sharing

# The Shift from Education 1.0 to Education 2.0

Characteristic	Education 1.0	Education 2.0
Primary role of professor	Source of knowledge	Guide and source of knowledge with a bigger role as orchestrator of collaborative knowledge creation
Content Arrangements	Traditional copyright materials	Copyright and free/open educational resources for students within discipline, sometimes across institutions. F/OER created and reused across multiple institutions
Learning Activities	Traditional, essays, assignments, tests, some groupwork within classroom	Open, flexible learning activities that focus on creating room for student creativity; social networking outside traditional boundaries of discipline, institution and nations
Institutional arrangements	Campus based with fixed boundaries between institutions; teaching, assessment and accreditation by one institution	Increasing loose institutional affiliations and relations
Student behavior	Largely passive absorptive	Active, strong sense of ownership of own education, co-creation of resources and opportunities and active choice
Technology	E-learning enabled through and electronic learning management system and limited to participation within one institution	E-learning driven from the perspective of personal distributed learning environments; consisting of a portfolio of applications



# Other Organisations Working on OER's

## Open Content: OpenCourseWare

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**Tufts**OpenCourseWare

**JHSPH**OPENCOURSEWARE  
Johns Hopkins Bloomberg School of Public Health

# Other Organisations Working on OER's

## Open Content: Full Courses

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# Other Organisations Working on OER's

## Open Content: Library Collections



Harvard University



CALIFORNIA DIGITAL LIBRARY

Supporting Scholarship • Building Collections & Services • Fostering Innovation & Collaboration



University of California

**calisphere** a world of digital resources

topics a-z home my picks about contact us

search for exact phrase go

**CITRUS LABEL COLLECTION**  
Orange Public Library Local History Collection  
more

**California Gold Rush**  
Collection of Early Californian and Western American Pictorial Material  
more

**Japanese Prints**  
Grunwald Center for the Graphic Arts, UCLA Hammer Museum  
more

**What's Here**

- Wide variety of **Primary Source** resources, including historic photographs, documents and diaries
- Over 100,000 **images** from archives and museums across California
- Over 300 **UC-created Web Sites** that reflect the diverse interests and scholarship of UC, including humanities, social sciences, math and science resources
- Excellent materials especially selected for **teachers**

**Topics A-Z** [see all topics](#)

ABCDEFGHIJKLMNOPQRSTUVWXYZ

**A** Adams, Asael  
adobe buildings  
advertisements (33)  
aerospace  
african american (815)  
African Americans, civil rights  
agricultural equipment (13)  
agricultural facilities (72)  
agriculture (368)  
agriculture and farming (2691)

**African Indians**  
Indians  
American Indians of the northwest  
American Indians of the northwest: customs, folklore traditions  
apex  
archaeology  
architects—California (46)  
arts & ornaments (49)  
automobile industry

**Selections from Calisphere** [see all topics](#)

**WW II Topics**  
Women enter wartime workforce/Lab

**Great Depression Topics**  
Dust bowl; migration

**Environment Topics**  
National Parks in California

**Struggle for Civil Rights/Social Movements**  
Free speech  
UPW  
Black panthers  
Women suffrage



# Other Organisations Working on OER's

## Open Content: Subject Area Collections

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Stanford Encyclopedia of Philosophy



# Other Organisations Working on OER's

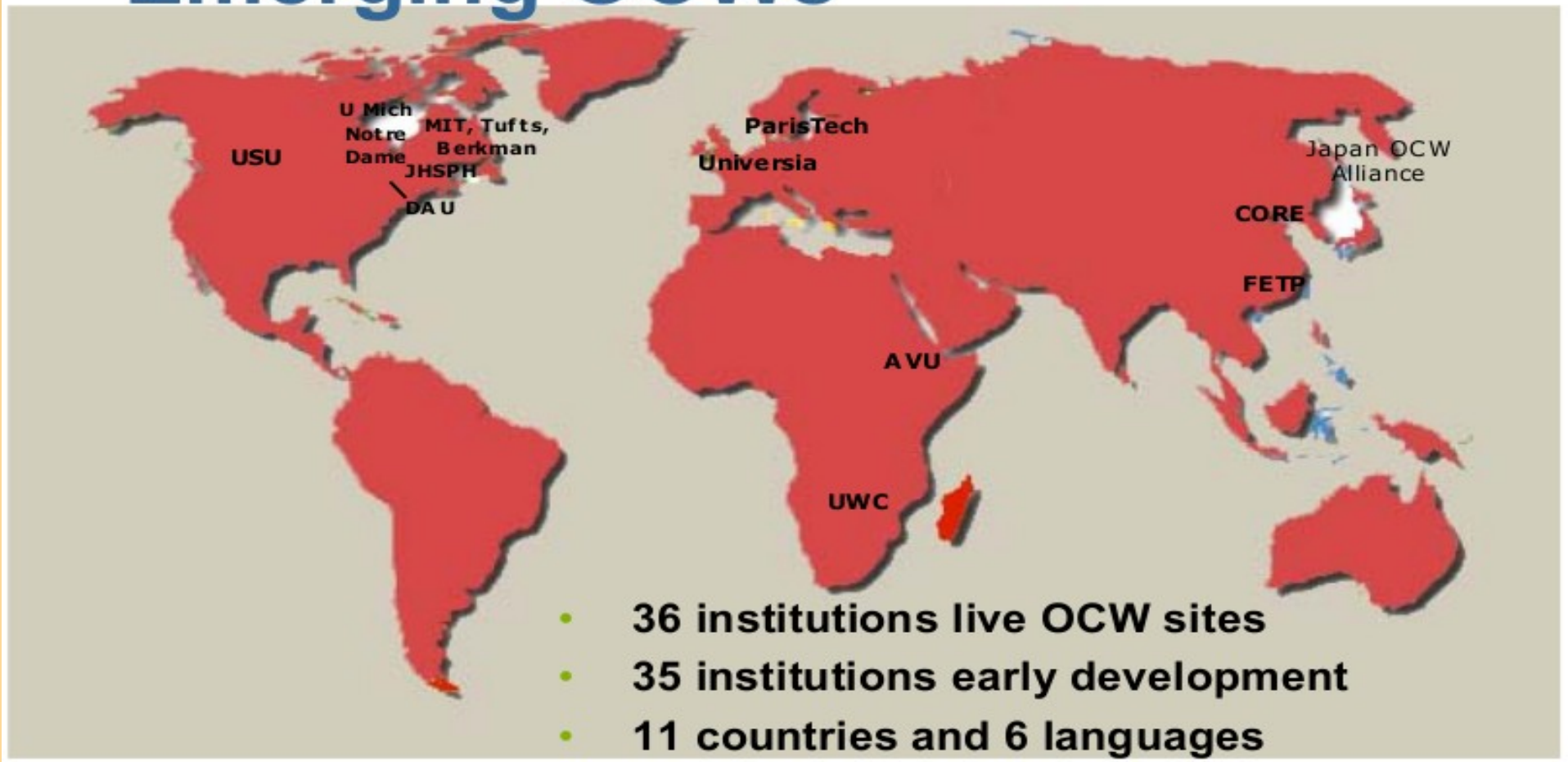
## Open Content: General Collections

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# Other Organisations Working on OER's

## OCW Movement – Emerging OCWs



# Other Organisations Working on OER's

## MIT OpenCourseWare (OCW)

- 1,100 course to date
- 1,800 course by 2007
- 33 disciplines




The screenshot shows the MIT OpenCourseWare website. At the top, there's a navigation bar with links for 'COURSE LIST', 'ABOUT OCW', 'HELP', and 'FEEDBACK'. Below this, the MIT logo and 'MIT OPENCOURSEWARE MASSACHUSETTS INSTITUTE OF TECHNOLOGY' are displayed. A welcome message states: 'Welcome to MIT OpenCourseWare, a free, open publication of MIT Course Materials. We invite you to [browse all the courses](#) available at this time.' On the left, there's a search bar and a list of disciplines: 'Aeronautics and Astronautics', 'Anthropology', 'Architecture', 'Chemical Engineering Division', and 'Biology'. The main content area features a 'Welcome to MIT's OpenCourseWare:' section, which describes it as a free and open educational resource for faculty, students, and self-learners. It lists three key points: 'Is a publication of MIT course materials', 'Does not require any registration', and 'Is not a degree-granting or certificate-granting activity'. To the right of this text is a portrait of a man, with a quote below it: 'This is an outstanding and incomparable stance of MIT to give access of invaluable learning quality to the world. I would like to express my gratitude.' -Thierno Yado Harjoko, educator from Depok, Indonesia. At the bottom, there's a link to 'Learn more about MIT OCW.'.



# Other Organisations Working on OER's

## Wikipedia 1.4 billion hits monthly



The screenshot shows the Wikipedia homepage in French. The main heading is 'Accueil' (Welcome). Below it, a blue box contains the text: 'Bienvenue sur Wikipédia. Wikipédia est un projet d'encyclopédie gratuite, écrite coopérativement et dont le contenu est réutilisable selon les conditions de la Licence de documentation libre GNU. Vous pouvez consulter un article ou participer vous-même au projet tout de suite !'. To the right, there is a section titled 'Encyclopédie' with various categories like 'Sciences naturelles & mathématiques', 'Sciences humaines', 'Arts et culture', 'Technique appliquées', 'Vie quotidienne', and 'Divers'. On the far right, a box titled 'in other languages' lists various languages including Český, Deutsch, Ελληνικά, Esperanto, Español, Français, हिन्दी, 日本語, Lëtzebuergesch, Nederlands, Polski, Română, Svenska, and Tiếng Việt. The left sidebar contains navigation links like 'Accueil', 'Accueil communauté', 'Actualités', 'Modifications récentes', 'Une page au hasard', 'Aide', and 'Aider financièrement Wikipédia'.

Créer un compte ou se connecter

article discussion voir le texte source historique

Tous les contributeurs actifs sont appelés à voter pour les élections du Conseil d'administration de la Wiki

### Accueil

Bienvenue sur Wikipédia

**Wikipédia** est un projet d'**encyclopédie** gratuite, écrite coopérativement et dont le contenu est réutilisable selon les conditions de la Licence de documentation libre GNU. Vous pouvez consulter un article ou participer vous-même au projet tout de suite !

Lisez le mode d'emploi, la FAQ ou faites des tests dans le bac à sable. Dans le Wikipédia francophone, **124299 articles** sont en cours d'élaboration. Une liste des articles récemment créés est disponible.

Si vous trouvez que Wikipédia est trop lent, vous pouvez aller consulter le statut des serveurs.

[En savoir plus](#)

### Article de la semaine

Nous vous proposons d'ôtter les articles sur les quatre saisons : été, automne, hiver et printemps ainsi que l'article heure d'été.

[Modifier](#)

### Encyclopédie

**Sciences naturelles & mathématiques**  
Astronomie - Biologie - Botanique - Chimie - Cryptologie - Écologie - Entomologie - Mathématiques - Physique - Sciences de la Terre - Sciences de l'Univers - Statistiques - Zoologie

**Sciences humaines**  
Anthropologie - Archéologie - Éducation - Géographie - Histoire - Langue et Linguistique - Musicologie - Pédagogie - Philosophie - Psychanalyse - Psychologie - Sciences cognitives - Sciences de l'information et des bibliothèques - Soins infirmiers - Sociologie

**Politique, droit et société**  
Associations et organismes - Commerce - Défense et sécurité - Droit - Économie - Entreprise - Environnement - Famille - Gestion - Métiers - Politique - Urbanisme

**Arts et culture**  
Animation - Arts visuels - Arts martiaux - Arts dessinés - Danse - Littérature - Musique - Photographie

**Technique appliquées**  
Aérospatial - Architecture - Design - Électronique - Industrie - Internet - Mécatronique - Technologie - Transport

**Vie quotidienne**  
Automobile - Divertissement - Nutrition - Santé - Télévision - Vieillesse

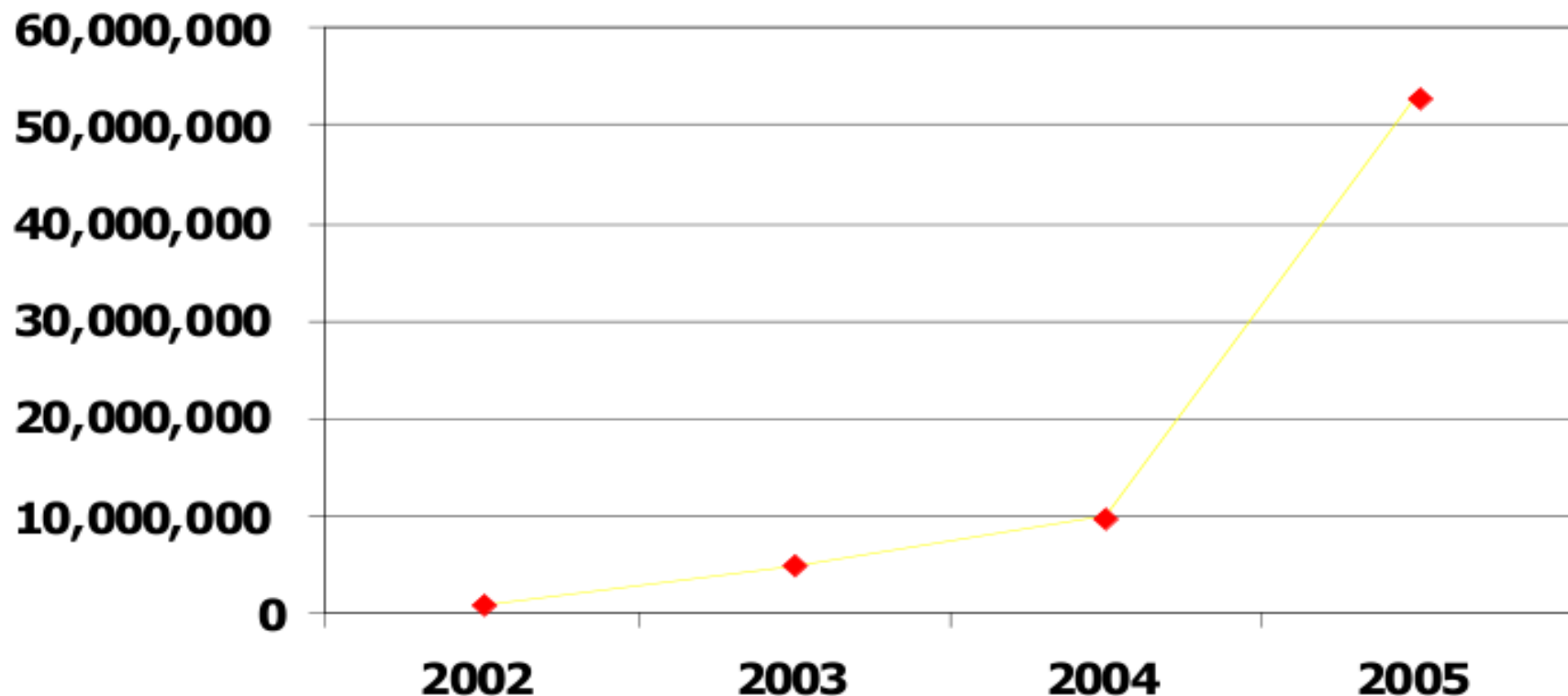
**Divers**  
[Index alphabétique](#)

### in other languages

- Česky
- Deutsch
- Ελληνικά
- Esperanto
- Español
- Français
- हिन्दी
- 日本語
- Lëtzebuergesch
- Nederlands
- Polski
- Română
- Svenska
- Tiếng Việt

# Other Organisations Working on OER's

## Creative Commons Licenses - Growing Adoption



# Other Organisations Working on OER's

## Growing Global Networks

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United Nations Educational,  
Scientific and Cultural Organization

THE COMMONWEALTH *of* LEARNING

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**The World Bank**

Working for a World Free of Poverty

Global Education and  
Learning Community



# FLOSS4Edu – The Vision

“By 2009 make available appropriate educational content and a set of easy to use FLOSS tools to 100 educational institutions while building the largest community of educational practitioners collaborating on the development of Free and Open Educational Resources in Africa”

# What does wikieducator believe in?

- The Commonwealth of Learning established the WikiEducator Initiative.
- Wikieducator believes in:
  - Social inclusion and participation of all people
  - Educators have the right to teach with the technologies and content of their choice
  - Educational Content is unique and working together improves the technology
  - Re-usability of digital learning resources
  - Working together to find appropriate and sustainable solutions for eLearning futures

# FLOSS4Edu – The Need

- Absence of Free and Open Educational Content for Educational Institutions
- The lack of valuable skills and knowledge to use FLOSS technologies
- Lack of access to existing FLOSS resources caused by high bandwidth costs and the absence of alternative FLOSS distributions channels
- The lack of easy to use FLOSS solutions

# FLOSS4Edu – The Strategy

- Build a strong community around creating Open Educational Content.
- Carry out promotional activities to improve awareness of FLOSS for Education solutions
- Support capacity building initiatives and develop relevant OER's for installation and pedagogical support
- Collaboratively work together towards the development of wiki based open educational content while packaging existing software applications in an easy to use manner
- Involve everyone in the development of content



# FLOSS4Edu – Achievements so far

- Development of over 100 lessons as OERs
- Establishment of 15 Expert groups from various Universities
- Implementation of five(5) capacity building workshops in University of Winneba(2), BOCODOL(1), Nairobi(3) with more upcoming
- Establishment of more regional FLOSS4Edu Chapters: West Africa, East Africa, India, Careabean, Southern Africa